

**Method of Manufacture of Silicon Based Package and
Devices Manufactured Thereby**

ABSTRACT

A Silicon Based Package (SBP) is formed starting with a thick wafer, which serves

5 as the base for the SBP, composed of silicon which has a first surface and a reverse

surface which are planar. Then form an interconnection structure including metal

capture structures in contact with the first surface and multilayer conductor

patterns over the first surface. Form a temporary bond between the SBP and a

wafer holder, with the wafer holder being a rigid structure. Thin the reverse side of

10 the wafer to a desired thickness to form an Ultra Thin Silicon Wafer (UTSW) for

the SBP. Form via holes with tapered or vertical sidewalls, which extend through

the UTSW to reach the metal capture structures. Then form metal pads in the via

holes which extend through the UTSW, making electrical contact to the metal

capture structures. Then bond the metal pads in the via holes to pads of a carrier.